

CHAIN OF CUSTODY REPORT

Work Order #: M108008

CLIENT: BRISTOL		INVOICE TO: BRISTOL		TURNAROUND REQUEST in Business Days* Organic & Inorganic Analyses <table border="1"><tr><td>10</td><td>7</td><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td><1</td></tr></table> STD. Petroleum Hydrocarbon Analyses <table border="1"><tr><td>5</td><td>4</td><td>3</td><td>2</td><td>1</td><td><1</td></tr></table> STD. OTHER Please Specify <small>*Turnaround Requests less than standard may incur Rush Charges.</small>				10	7	5	4	3	2	1	<1	5	4	3	2	1	<1
10	7	5	4					3	2	1	<1										
5	4	3	2					1	<1												
REPORT TO: ANNE KRANAWETTER		P.O. NUMBER: 21090																			
ADDRESS: AMCHITKA, AK		REQUESTED ANALYSES																			
PHONE: 907-770-0974 FAX: 770-0975																					
PROJECT NAME: AMCHITKA																					
PROJECT NUMBER: 21090																					
SAMPLED BY: ARV/crm																					
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	PB	Metals													MATRIX (W, S, O)	# OF CONT.	COMMENTS	NCA WO ID		
1. 01AMLA37SL	8/5/01 1115	Y	X													S	2				
2. 01AMLA38SL	8/5/01 1110	X	X													S	2				
3. 01AMLA39SL	8/5/01 1105	X	X													S	2				
4. 01AMLA40SL	8/5/01 1055	X	X													S	2				
5.																					
6.																					
7.																					
8.																					
9.																					
10.																					
11.																					
12.																					
13.																					
14.																					
15.																					
RELINQUISHED BY: Anne Kranawetter		DATE: 8/5/01		RECEIVED BY: Craig Bradle		DATE: 8/5/01															
PRINT NAME: Anne Kranawetter		FIRM: BRISTOL		TIME: 1144		PRINT NAME: Craig Bradle		FIRM: NCA		TIME: 1144											
RELINQUISHED BY:		DATE:		RECEIVED BY:		DATE:															
PRINT NAME:		FIRM:		TIME:		PRINT NAME:		FIRM:		TIME:											
ADDITIONAL REMARKS: Sewage Lagoon Confirmation Sampling																		TEMP: 7.5°C		PAGE 1 OF 1	



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541.383.9310 fax 541.382.7588

20 August, 2001

Steve Johnson
Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

RE: Amchitka

Enclosed are the results of analyses for samples received by the laboratory on 08/09/01 11:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Jerry Orlando
Project Manager/QA

Work Orders included in this report:

P1H0253



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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Steve Johnson

Reported:
08/20/01 16:11

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
01AMLA37SL	P1H0253-01	Soil	08/05/01 11:15	08/09/01 11:00
01AMLA38SL	P1H0253-02	Soil	08/05/01 11:10	08/09/01 11:00
01AMLA39SL	P1H0253-03	Soil	08/05/01 11:05	08/09/01 11:00
01AMLA40SL	P1H0253-04	Soil	08/05/01 10:55	08/09/01 11:00

North Creek Analytical - Portland

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

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Jerry Orlando, Project Manager/QA

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Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Steve Johnson

Reported:
08/20/01 16:11

Total Metals per EPA 6000/7000 Series Methods

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA37SL (P1H0253-01) Soil						Sampled: 08/05/01 Received: 08/09/01			
Arsenic	5.09	0.500	mg/kg dry	1	EPA 6020	08/13/01	08/15/01	1081294	
Cadmium	ND	0.500	"	10	"	"	"	"	
Chromium	14.4	0.500	"	"	"	"	"	"	
Lead	4.22	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	1	"	"	"	"	
Silver	ND	0.500	"	10	"	"	"	"	
01AMLA38SL (P1H0253-02) Soil						Sampled: 08/05/01 Received: 08/09/01			
Arsenic	3.26	0.500	mg/kg dry	1	EPA 6020	08/13/01	08/15/01	1081294	
Cadmium	ND	0.500	"	10	"	"	"	"	
Chromium	12.3	0.500	"	"	"	"	"	"	
Lead	4.74	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	1	"	"	"	"	
Silver	ND	0.500	"	10	"	"	"	"	
01AMLA39SL (P1H0253-03) Soil						Sampled: 08/05/01 Received: 08/09/01			
Arsenic	3.27	0.500	mg/kg dry	1	EPA 6020	08/13/01	08/15/01	1081294	
Cadmium	ND	0.500	"	10	"	"	"	"	
Chromium	11.0	0.500	"	"	"	"	"	"	
Lead	4.03	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	1	"	"	"	"	
Silver	ND	0.500	"	10	"	"	"	"	
01AMLA40SL (P1H0253-04) Soil						Sampled: 08/05/01 Received: 08/09/01			
Arsenic	3.43	0.500	mg/kg dry	1	EPA 6020	08/13/01	08/15/01	1081294	
Cadmium	ND	0.500	"	10	"	"	"	"	
Chromium	14.2	0.500	"	"	"	"	"	"	
Lead	4.60	0.500	"	"	"	"	"	"	
Selenium	ND	0.500	"	1	"	"	"	"	
Silver	ND	0.500	"	10	"	"	"	"	

North Creek Analytical - Portland

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Bristol Environmental & Engineering
2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Steve Johnson


Reported:
08/20/01 16:11

Mercury by EPA Method 1631
North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA37SL (P1H0253-01) Soil						Sampled: 08/05/01 Received: 08/09/01			
Mercury	0.0124	0.00100	mg/kg dry	1	EPA 1631	08/14/01	08/17/01	1081295	
01AMLA38SL (P1H0253-02) Soil						Sampled: 08/05/01 Received: 08/09/01			
Mercury	0.0111	0.00100	mg/kg dry	1	EPA 1631	08/14/01	08/17/01	1081295	
01AMLA39SL (P1H0253-03) Soil						Sampled: 08/05/01 Received: 08/09/01			
Mercury	0.00962	0.00100	mg/kg dry	1	EPA 1631	08/14/01	08/17/01	1081295	
01AMLA40SL (P1H0253-04) Soil						Sampled: 08/05/01 Received: 08/09/01			
Mercury	0.0157	0.00100	mg/kg dry	1	EPA 1631	08/14/01	08/17/01	1081295	

North Creek Analytical - Portland

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Steve Johnson

Reported:
 08/20/01 16:11

Percent Dry Weight (Solids) per Standard Methods North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Dilution	Method	Prepared	Analyzed	Batch	Notes
01AMLA37SL (P1H0253-01) Soil						Sampled: 08/05/01 Received: 08/09/01			
% Solids	76.7	1.00	% by Weight	1	NCA SOP	08/13/01	08/14/01	1081268	
01AMLA38SL (P1H0253-02) Soil						Sampled: 08/05/01 Received: 08/09/01			
% Solids	74.5	1.00	% by Weight	1	NCA SOP	08/13/01	08/14/01	1081268	
01AMLA39SL (P1H0253-03) Soil						Sampled: 08/05/01 Received: 08/09/01			
% Solids	77.0	1.00	% by Weight	1	NCA SOP	08/13/01	08/14/01	1081268	
01AMLA40SL (P1H0253-04) Soil						Sampled: 08/05/01 Received: 08/09/01			
% Solids	73.1	1.00	% by Weight	1	NCA SOP	08/13/01	08/14/01	1081268	

North Creek Analytical - Portland

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 Jerry Orlando, Project Manager/QA

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 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Steve Johnson

Reported:
 08/20/01 16:11

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1081294 - EPA 3050

Blank (1081294-BLK1)

Prepared: 08/13/01 Analyzed: 08/15/01

Arsenic	ND	0.500	mg/kg
Cadmium	ND	0.500	"
Chromium	ND	0.500	"
Lead	ND	0.500	"
Selenium	ND	0.500	"
Silver	ND	0.500	"

LCS (1081294-BS1)

Prepared: 08/13/01 Analyzed: 08/15/01

Arsenic	10.1	0.500	mg/kg	10.0	101	80-120
Cadmium	10.2	0.500	"	10.0	102	80-120
Chromium	10.2	0.500	"	10.0	102	80-120
Lead	9.95	0.500	"	10.0	99.5	80-120
Selenium	9.91	0.500	"	10.0	99.1	80-120
Silver	4.76	0.500	"	5.00	95.2	80-120

Duplicate (1081294-DUP1)

Source: P1H0333-01

Prepared: 08/13/01 Analyzed: 08/15/01

Arsenic	8.34	0.500	mg/kg dry	5.42	42.4	40	Q-14
Cadmium	ND	0.500	"	ND		40	
Chromium	6.34	0.500	"	3.33	62.3	40	Q-14
Lead	9.56	0.500	"	7.85	19.6	40	
Selenium	0.551	0.500	"	0.745	29.9	40	
Silver	ND	0.500	"	ND	11.0	40	

Matrix Spike (1081294-MS1)

Source: P1H0333-01

Prepared: 08/13/01 Analyzed: 08/15/01

Arsenic	16.3	0.500	mg/kg dry	12.1	5.42	89.9	75-125
Cadmium	11.1	0.500	"	12.1	ND	91.7	75-125
Chromium	15.2	0.500	"	12.1	3.33	98.1	75-125
Lead	17.8	0.500	"	12.1	7.85	82.2	75-125
Selenium	12.4	0.500	"	12.1	0.745	96.3	75-125
Silver	5.55	0.500	"	6.05	ND	90.0	75-125

North Creek Analytical - Portland

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Jerry Orlando, Project Manager/QA

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Bristol Environmental & Engineering
 2000 W. International Airport Rd. #C-1
 Anchorage, AK 99502-1116

Project: Amchitka
 Project Number: 210901, PO# 21090
 Project Manager: Steve Johnson

Reported:
 08/20/01 16:11

Total Metals per EPA 6000/7000 Series Methods - Quality Control

North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1081294 - EPA 3050

Matrix Spike (1081294-MS2)


Source: P1H0253-01

Prepared: 08/13/01 Analyzed: 08/15/01

Arsenic	16.2	0.500	mg/kg dry	13.0	5.09	85.5	75-125			
Cadmium	13.2	0.500	"	13.0	ND	101	75-125			
Chromium	22.5	0.500	"	13.0	14.4	62.3	75-125			
Lead	16.6	0.500	"	13.0	4.22	95.2	75-125			Q-14
Selenium	13.7	0.500	"	13.0	ND	104	75-125			
Silver	6.32	0.500	"	6.51	ND	96.3	75-125			

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2000 W. International Airport Rd. #C-1
Anchorage, AK 99502-1116

Project: Amchitka
Project Number: 210901, PO# 21090
Project Manager: Steve Johnson

Reported:
08/20/01 16:11

Mercury by EPA Method 1631 - Quality Control


North Creek Analytical - Portland

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 1081295 - EPA 7471									
Blank (1081295-BLK1)									
Mercury	ND	0.00100	mg/kg						Prepared: 08/14/01 Analyzed: 08/17/01
LCS (1081295-BS1)									
Mercury	0.00990	0.00100	mg/kg	0.0100		99.0 85-115			Prepared: 08/14/01 Analyzed: 08/17/01
Duplicate (1081295-DUP1)									
Mercury	0.0100	0.00100	mg/kg dry		0.0110		9.52	20	Source: P1H0252-04 Prepared: 08/14/01 Analyzed: 08/17/01
Matrix Spike (1081295-MS1)									
Mercury	0.0221	0.00100	mg/kg dry	0.0128	0.0110	86.7 75-125			Source: P1H0252-04 Prepared: 08/14/01 Analyzed: 08/17/01
Matrix Spike (1081295-MS2)									
Mercury	0.0494	0.00100	mg/kg dry	0.0115	0.0432	53.9 75-125			Source: P1H0333-04 Prepared: 08/14/01 Analyzed: 08/17/01

Q-02

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08/20/01 16:11

Percent Dry Weight (Solids) per Standard Methods - Quality Control

North Creek Analytical - Portland


Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 1081268 - Dry Weight

Duplicate (1081268-DUP1)		Source: P1H0252-07			Prepared: 08/13/01		Analyzed: 08/14/01			
% Solids	71.6	1.00 % by Weight			70.4			1.69	20	
Duplicate (1081268-DUP2)		Source: P1H0253-01			Prepared: 08/13/01		Analyzed: 08/14/01			
% Solids	77.2	1.00 % by Weight			76.7			0.650	20	

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
Reported:
08/20/01 16:11

Notes and Definitions

- Q-02 The spike recovery for this QC sample is outside of established control limits due to sample matrix interference.
- Q-14 The Spike Recovery and/or RPD is outside of control limits due to a non-homogeneous sample matrix.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis. MRLs are adjusted if %Solids are less than 50%.
- wet Sample results reported on a wet weight basis (as received)
- RPD Relative Percent Difference

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